

## TERMS AND DEFINITIONS IN RECOMMENDED STANDARDS CHART—Continued

[Reproduced from Appendix B, Details of Recommended Security Standards, U.S. Department of Justice, United States Marshals Service report *Vulnerability Assessment of Federal Facilities*]

Term	Definition/description
Establish Standardized Armed And Unarmed Guard Qualifications/Training Requirements.	Requirements for these positions should be standardized government wide.
<b>Tenant Assignment</b>	
Co-Locate Agencies With Similar Security Needs.	To capitalize on efficiencies and economies, agencies with like security requirements should be located in the same facility if possible.
Do Not Co-Locate High/Low Risk Agencies	Low risk agencies should not take on additional risk by being located with high risk agencies.
<b>Administrative Procedures</b>	
Establish Flexible Work Schedule in High Threat/High Risk Area to Minimize Employee Vulnerability to Criminal Activity.	Flexible work schedules can enhance employee safety by staggering reporting and departure times. As an example flexible schedules might enable employees to park closer to the facility by reducing the demand for parking at peak times of the day.
Arrange for Employee Parking In/Near Building After Normal Work Hours.	Minimize exposure to criminal activity by allowing employees to park at or inside the building.
Conduct Background Security Checks and/or Establish Security Control Procedures for Service Contract Personnel.	Establish procedures to ensure security where private contract personnel are concerned. Procedures may be as simple as observation or could include sign-in/escort. Frequent visitors may necessitate a background check with contractor ID issued.
<b>Construction/Renovation</b>	
Install Mylar Film on All Exterior Windows (Shatter Protection).	Application of shatter resistant material to protect personnel and citizens from the hazards of flying glass as a result of impact or explosion.
Review Current Projects For Blast Standards.	Design and construction projects should be reviewed if possible, to incorporate current technology and blast standards. Immediate review of ongoing projects may generate savings in the implementation of upgrading to higher blast standards prior to completion of construction.
Review/Establish Uniform Standards For Construction.	Review, establish, and implement uniform construction standards as it relates to security considerations.
Review/Establish New Design Standard for Blast RESISTANCE.	In smaller facilities or those that lease space, control over design standards may not be possible. However, future site selections should attempt to locate in facilities that do meet standards. New construction of government controlled facilities should review, establish, and implement new design standards for blast resistance.
Establish Street Set-Back for New Construction.	Every foot between a potential bomb and a building will dramatically reduce damage and increase the survival rate. Street set-back is always desirable, but should be used in conjunction with barriers in Level IV and V facilities.
(Reproduced from Appendix C, <i>Classification Table</i> , U.S. Department of Justice, United States Marshals Service report <i>Vulnerability Assessment of Federal Facilities</i> )	
Level	Typical location
III .....	Agency Mix: Government Records.

#### APPENDIX B TO PART 1234—ALTER-NATIVE CERTIFIED FIRE-SAFETY DETECTION AND SUPPRESSION SYSTEM(S)

1. *General.* This Appendix B contains information on the Fire-safety Detection and Suppression System(s) tested by NARA through independent live fire testing that are certified to meet the requirement in §1234.12(s) for storage of Federal Records. Use of a system specified in this appendix is optional. A facility may choose to have an alternate fire-safety detection and suppression system approved under §1234.32).

2. *Specifications for NARA facilities using 15 foot high records storage.* NARA fire-safety systems that incorporate all components specified in paragraphs 2.a. through n. of this appendix have been tested and certified to meet the requirements in §1234.12(s) for an acceptable fire-safety detection and suppression system for storage of Federal records.

a. The records storage height must not exceed the nominal 15 feet (±3 inches) records storage height.

b. All records storage and adjoining areas must be protected by automatic wet-pipe

sprinklers. Automatic sprinklers are specified herein because they provide the most effective fire protection for high piled storage of paper records on open type shelving.

c. The sprinkler system must be rated at no higher than 285 degrees Fahrenheit utilizing quick response (QR) fire sprinkler heads and designed by a licensed fire protection engineer to provide the specified density for the most remote 1,500 square feet of floor area at the most remote sprinkler head in accordance with NFPA 13 (incorporated by reference, see §1234.3). For facilities with roofs rated at 15 minutes or greater, provide ½" QR sprinklers rated at no higher than 285 degrees Fahrenheit designed to deliver a density of 0.30 gpm per square foot. For unrated roofs, provide 0.64" QR "large drop" sprinklers rated at no higher than 285 degrees Fahrenheit. For facilities using 7 or 8 shelf track files, use QR sprinklers rated at no higher than 285 degrees Fahrenheit. For new construction and replacement sprinklers, NARA recommends that the sprinklers be rated at 165 degrees Fahrenheit. Installation of the sprinkler system must be in accordance with NFPA 13 (incorporated by reference, see §1234.3).

d. Maximum spacing of the sprinkler heads must be on a 10-foot grid and the positioning of the heads must provide complete, unobstructed coverage, with a clearance of not less than 18 inches from the top of the highest stored materials.

e. The sprinkler system must be equipped with a water-flow alarm connected to an audible alarm within the facility and to a continuously staffed fire department or an Underwriters Laboratory approved central monitoring station (see UL 827 (incorporated by reference, see §1234.3)) with responsibility for immediate response.

f. A manual fire alarm system must be provided with a Underwriters Laboratory approved (grade A) central monitoring station service or other automatic means of notifying the municipal fire department. A manual alarm pull station must be located adjacent to each exit. Supplemental manual alarm stations are permitted within the records storage areas.

g. All water cutoff valves in the sprinkler system must be equipped with automatic closure alarm (tamper alarm) connected to a continuously staffed station, with responsibility for immediate response. If the sprinkler water cutoff valve is located in an area used by the public, in addition to the tamper alarm, the valves must be provided with frangible (easily broken) padlocks.

h. A dependable water supply free of interruption must be provided including a continuous site fire loop connected to the water main and sized to support the facility with only one portion of the fire loop operational. This normally requires a backup supply system having sufficient pressure and capacity

to meet both fire hose and sprinkler requirements for 2-hours. A fire pump connected to an emergency power source must be provided in accordance with NFPA 20 (incorporated by reference, see §1234.3), when adequate water pressure is not assured. In the event that public water mains are not able to supply adequate volumes of water to the site, on-site water storage must be provided.

i. Interior fire hose stations equipped with a 1½ inch diameter hose may be provided in the records storage areas if required by the local fire department, enabling any point in the records storage area to be reached by a 50-foot hose stream from a 100-foot hose lay. If provided, these cabinets must be marked "For Fire Department Use Only."

j. Where fire hose cabinets are not required, fire department hose outlets must be provided at each floor landing in the building core or stair shaft. Hose outlets must have an easily removable adapter and cap. Threads and valves must be compatible with the local fire department's equipment. Spacing must be so that any point in the record storage area can be reached with a 50-foot hose stream from a 100-foot hose lay.

k. In addition to the designed sprinkler flow demand, 500 gpm must be provided for hose stream demand. The hose stream demand must be calculated into the system at the base of the main sprinkler riser.

l. Fire hydrants must be located within 250 feet of each exterior entrance or other access to the records storage facility that could be used by firefighters. Each required hydrant must provide a minimum flow capacity of 500 gpm at 20 psi. All hydrants must be at least 50 feet away from the building walls and adjacent to a roadway usable by fire apparatus. Fire hydrants must have at least two, 2½ inch hose outlets and a pumper connection. All threads must be compatible with local standards.

m. Portable water-type fire extinguishers (2½ gallon stored pressure type) must be provided at each fire alarm striking station. The minimum number and locations of fire extinguishers must be as required by NFPA 10 (incorporated by reference, see §1234.3).

n. Single level catwalks without automatic sprinklers installed underneath may be provided in the service aisles if the edges of all files in the front boxes above the catwalks are stored perpendicular to the aisle (to minimize files exfoliation in a fire). Where provided, the walking surface of the catwalks must be of expanded metal at least .09-inch thickness with a 2-inch mesh length. The surface opening ratio must be equal or greater than 0.75. The sprinkler water demand for protection over bays with catwalks where records above the catwalks are not perpendicular to the aisles must be calculated hydraulically to give .30 gpm per square foot for the most remote 2,000 square feet.